

DERWENT-ACC-NO: 1995-276672

DERWENT-WEEK: 199802

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Two layer textile reinforcement for  
bituminous roofing felt - uses first layer of  
consolidated and thermostabilised non-woven material  
joined by bonding or sewing to second layer of glass fibre  
fabric, mesh or non-woven material

INVENTOR: BARAVIAN, J; BECK, J ; GROTEN, R ; JAHN, U ;  
BAWEIYAN, J ; GELOTEN, R  
; YAN, U

PATENT-ASSIGNEE: FREUDENBERG SPUNWEB SA[FREU] ,  
FREUDENBERG SPUNWEB CO  
LTD[FREU]

PRIORITY-DATA: 1994FR-0001671 (February 10, 1994)

PATENT-FAMILY:

PUB-NO LANGUAGE	PAGES	PUB-DATE MAIN-IPC	
EP 667427 A1		August 16, 1995	F
010	E04D	005/02	
CN 1133383 A		October 16, 1996	N/A
000	E04D	011/00	
FR 2715957 A1		August 11, 1995	N/A
007	E04D	005/10	
CA 2142155 A		August 11, 1995	F
000	B32B	017/02	
BR 9500603 A		September 26, 1995	N/A
000	E04B	001/66	
JP 07276556 A		October 24, 1995	N/A
007	B32B	011/02	
ZA 9500961 A		February 28, 1996	N/A
021	E04D	000/00	
ES 2086285 T1		July 1, 1996	N/A
000	E04D	005/02	

US 5616395 A  
006

April 1, 1997  
B32B 005/06

N/A

DESIGNATED-STATES: AT BE CH DE DK ES FR GB GR IE IT LI LU  
MC NL PT SE

CITED-DOCUMENTS: EP 110039; EP 176847 ; EP 185169 ; EP  
208918 ; EP 315553 ; EP  
435001

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-DESCRIPTOR	APPL-NO
EP 667427A1		N/A	
1995EP-0440005		February 8, 1995	
CN 1133383A		N/A	
1995CN-0101533		February 10, 1995	
FR 2715957A1		N/A	
1994FR-0001671		February 10, 1994	
CA 2142155A		N/A	
1995CA-2142155		February 9, 1995	
BR 9500603A		N/A	
1995BR-0000603		February 9, 1995	
JP 07276556A		N/A	
1995JP-0044989		February 10, 1995	
ZA 9500961A		N/A	
1995ZA-0000961		February 7, 1995	
ES 2086285T1		N/A	
1995EP-0440005		February 8, 1995	
ES 2086285T1		Based on	EP 667427
N/A			
US 5616395A		N/A	
1995US-0386081		February 9, 1995	

INT-CL (IPC): B32B005/06, B32B005/26 , B32B011/02 ,  
B32B017/02 ,  
D04H001/46 , D04H005/02 , D04H013/00 , D06M000/00 ,  
D06N005/00 ,  
E04B001/66 , E04B001/94 , E04D000/00 , E04D005/02 ,  
E04D005/10 ,  
E04D011/00

ABSTRACTED-PUB-NO: EP 667427A

BASIC-ABSTRACT:

Prod'n. of two layer textile reinforcement for bituminous roof sealing coating consists of taking a non-woven layer and consolidating it by mechanical binding or hydraulic binding e.g. by water jet; then thermostabilising at 180-240, pref. 200-220 deg.C for 5-60, pref. 8-20 secs.. That layer is then assembled with a second mineral fibre, esp. glass fibre, layer by bonding, sewing or knitting. The last two methods are only used when the second layer is a fabric or a mesh. The adhesive for bonding is a thermoplastic or hot-set polymer e.g. polyester, polyamide, polyurethane or EVA, with m.pt. of 160-220 pref. 190-200 deg.C.

USE - Bituminous roofing felt reinforcement.

ADVANTAGE - Provides fire barrier in felt without problems of delamination and retaining dimensional stability.

ABSTRACTED-PUB-NO: US 5616395A

#### EQUIVALENT-ABSTRACTS:

A two-layer composite sheet having utility as a reinforcement for bituminous roofing comprises: a first nonwoven base sheet layer which has been mechanically or hydraulically consolidated, heat-set and, through the agency of an applied adhesive and not through fusion of a component fiber of the nonwoven base sheet, adhered to a second layer selected from the group consisting of a scrim, grid, and cloth of mineral fibers, providing that when the second layer is in the form of a grid or cloth, the consolidated and heat set nonwoven base sheet is also needle-bonded or stitch-knitted to the second layer.

CHOSEN-DRAWING: Dwg.1/1 Dwg.0/1

TITLE-TERMS: TWO LAYER TEXTILE REINFORCED BITUMEN ROOF FELT

FIRST LAYER

CONSOLIDATE THERMOSTABLE NON WOVEN MATERIAL  
JOIN BOND SEW SECOND  
LAYER GLASS FIBRE FABRIC MESH NON WOVEN  
MATERIAL

DERWENT-CLASS: A93 L02 P73 Q45

CPI-CODES: A03-C03; A08-R01; A11-B09A1; A12-R05; A12-S08D;  
A12-S08F; L02-D10;

ENHANCED-POLYMER-INDEXING:

Polymer Index [1.1]

017 ; G3612 G3601 P0599 D01

Polymer Index [1.2]

017 ; ND01 ; K9892 ; Q9999 Q6860 Q6826 ; K9905 ; B9999

B4239 ; B9999

B3758\*R B3747

Polymer Index [1.3]

017 ; G2891 D00 Si 4A ; A999 A419 ; A999 A771 ; N9999

N5721\*R ;

N9999 N6246 ; S9999 S1161\*R S1070 ; S9999 S1183 S1161

S1070

Polymer Index [2.1]

017 ; H0328 ; H0317 ; P0839\*R F41 D01 D63

Polymer Index [2.2]

017 ; H0328 ; H0317 ; P0635\*R F70 D01

Polymer Index [2.3]

017 ; H0328 ; H0317 ; P1592\*R F77 D01

Polymer Index [2.4]

017 ; R00326 G0044 G0033 G0022 D01 D02 D12 D10 D51 D53

D58 D82 ;

R00835 G0566 G0022 D01 D11 D10 D12 D51 D53 D58 D63 D84

F41 ; H0328

; H0317 ; H0022 H0011 ; P1150 ; P1310

Polymer Index [2.5]

017 ; ND01 ; N9999 N5721\*R ; Q9999 Q6644\*R ; B9999

B5607 B5572 ;

N9999 N6199 N6177 ; B9999 B4239 ; B9999 B5301 B5298

B5276 ; B9999

B3758\*R B3747 ; K9745\*R

Polymer Index [3.1]

017 ; P0884 P0839 H0293 F41 D01 D11 D10 D19 D18 D31 D50

D63 D90

E21 E00 ; H0317 ; P0839\*R F41 D01 D63 ; A999 A419 ;

A999 A782 ;

S9999 S1183 S1161 S1070

Polymer Index [3.2]

017 ; H0317 ; P0635\*R F70 D01 ; A999 A419 ; A999 A782 ;  
S9999 S1183  
S1161 S1070  
Polymer Index [3.3]  
017 ; H0317 ; P1592\*R F77 D01 ; A999 A419 ; A999 A782 ;  
S9999 S1183  
S1161 S1070  
Polymer Index [3.4]  
017 ; N9999 N5721\*R ; N9999 N6246 ; N9999 N6199 N6177 ;  
B9999 B4239  
; B9999 B3758\*R B3747 ; N9999 N5970\*R ; N9999 N6962\*R

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C1995-125451

Non-CPI Secondary Accession Numbers: N1995-211570